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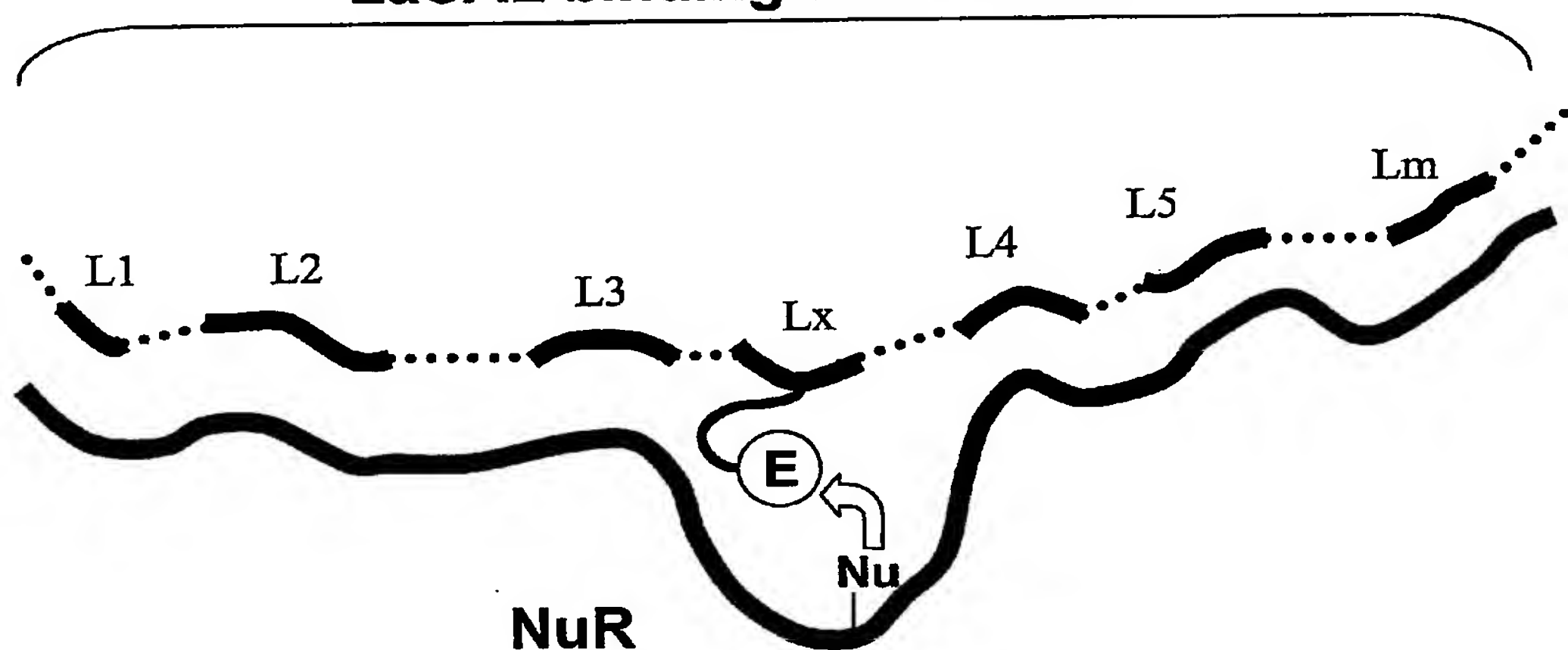
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(54) Title: COVALENT ATTACHMENT OF LIGANDS TO NUCLEOPHILIC PROTEINS GUIDED BY NON-COVALENT BINDING

LaCAL binding determinant



(57) Abstract: A covalently reactive ligand analogue (CAL) of formula (1): wherein, $L_1 \dots L_x \dots L_m$ are components defining a ligand determinant, L_x is a component unit of the ligand determinant selected from the group consisting of an amino acid residue, sugar residue, a fatty acid residue and a nucleotide, L' is a functional group of L_x , Y'' is atom, covalent bond or linker, Y' is an optional charged or neutral group Y is a covalently reactive electrophilic group that reacts specifically with a receptor that binds to said ligand determinant, and n is an integer from 1 to 1000 m is an integer from 1 to 30.